SCIENTIFIC OPINION

Regarding a contest for an Academic Position "Associate Professor", Professional field 5.2 "Electrical Engineering, Electronics and Automation", Specialty "Design of electronic equipment", published in the State Gazette no. 108/December 22.2020. with candidate Assist. Prof. Dr. Eng. Toncho Hristov Papanchev Member of the Scientific Jury: Prof. Dr. Eng. Vencislav Cekov Valchev

1. General characteristics of the applicant's scientific research and implementation activities.

Assist. Prof. Dr. eng. Toncho Hristov Papanchev graduated from the Technical University – Varna, in 1992 with a Master's Degree. The candidate is awarded a Ph.D. Degree in Scientific Specialty "Electronics" after training in the period 2010 ÷ 2015.

He is an assistant professor in the Department of Electronic Engineering and Microelectronics in the period 2010 – 2016. From 2017 onwards he employed in the Department as Senior Assistant Professor.

Before joining Technical University – Varna he works as a consultant and manager in a company working in the field of computers and office equipment.

The candidate Dr. eng. Toncho Hristov Papanchev participates in the contest by fully covering the required scientific works and quantitative scientific scores, the more significant of which are:

- Dissertation, developed and successfully completed, in the scientific field of the contest 5.2.
- 30 scientific publications separated into two groups:
 - 1. Habilitation work of 11 scientific publications, referenced and indexed in world-renowned scientific information databases, related to Indicator Group B. The candidate has a total of 179 points with requirement of 100 points.
 - 2. Second group of 19 scientific publications not covered by the habilitation work, 7 of which are in referenced journals and 11 of which are in non-referenced scientific journals. This group of publications covers the requirements related to Indicator Group Γ with a total of 237.29 points.
- Citations. The presented citations are in relation to the requirements of Indicator Group Д of the minimal national requirements and grant a total of 104 points.

Dr. eng. Toncho Hristov Papanchev has participated in 11 scientific projects with scientific, application-specific and educational aim. From the presented projects 4 can be additionally outlined: 1 project financed by the MES; 1 project financed by OP HRD and 2 projects financed by OP "SESG".

Significant evidence for the contribution of the candidate to the development of the scientific and research base of the Technical University – Varna and the participation in one international mobility (Patra, Greece) have been presented.

In conclusion: The candidate covers all Indicator Group for AP "Associate Professor" in the Area of High Education (AHE) "Technical Sciences".

2. Assessment of the candidate's pedagogical preparation and activity.

Dr. eng. Papanchev has more than 10 years of experience as an assistant professor and senior assistant professor in Department of Electronic Engineering and

Microelectronics in the Technical University - Varna. He has thought classes in 16 subjects in both Bachelor and Master courses. He has significant experience as a lecturer with a total of 439 hours of lectures for the past 3 years. The candidate has a published textbook – a laboratory exercise guide.

I have direct observations about the candidate's pedagogical activity as we are in one and the same department. He manages well with the duties of a lecturer.

The candidate has the required academic and pedagogical preparation required for AP "Associate Professor"".

3. Basic scientific and applied contributions.

I accept the significant contributions submitted by the applicant in the publication groups related to indicators B and Γ . In summary, the applicant's contributions are:

- Reliability of electronic components quantitative indicators;
- Reliability of electronic components design specifics;
- Exploitation reliability;
- Use of artificial intelligence for modelling and design of electronic applications and control.

4. Significance of contributions to science and practice.

The impact of contributions to science may be found be the number of publications in SCOPUS database (19 issues visible as of 30.04.2021), as well as number of citations in the same database (75 with included self-citations, visible as of 30.04.2021).

The quantitative indicators of the criteria for occupation of AP "Associate Professor" in the AHE "Technical Sciences" have been met.

The contributions of Dr. Papanchev are of both scientific and practical significance.

5. Critical notes and recommendations.

I have no significant comments or recommendations on the materials presented to me.

My main recommendation is for more active participation in scientific and research projects and attraction of funding for TU Varna.

CONCLUSION

The scientific production presented by Dr. Toncho Papanchev and the drafting of the documents are in accordance with the LPRAP, the Rules for its implementation and the Rules for the terms and conditions for occupying academic positions at the Technical Uni-versity - Varna in the part for AP 'Associate Professor'.

Based on my acquaintance with the submitted scientific papers (abstracts), the submitted scientific and applied contributions and the fulfilment of the minimum national requirements, I propose Dr. eng. Toncho Hristov Papanchev to obtain an academic position of "Associate Professor" in the professional field 5.2 Electrical Engineering, Electronics and Automation, scientific specialty: "Design of electronic equipment", depart. ETM at the FITA of the Technical University - Varna.

30.04.2021 г. TU – Varna

Member of the Scientific Jury:

/ Prof. Dr. Eng. Vencislav Cekov Valchev /